APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,787	07/27/2001	Paul Steven Halverson	ROC920010042US1	8814

7590 05/13/2005	EXAMINER
Gero G. McClellan	SCHLAIFER, JONATHAN D
Thomason, Moser & Patterson, L.L.P.	

ART UNIT	PAPER NUMBER
2178	

Gero G. McClellan
Thomason, Moser & Patterson, L.L.P.
Suite 1500
3040 Post Oak Boulevard
Houston, TX 77056-6582

DATE MAILED: 05/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/916,787	HALVERSON, PAUL STEVEN
	Examiner	Art Unit	
	Jonathan D. Schlaifer	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 January 2005*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
    closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,10-13,15-19,21-28,30 and 31* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,10-13,15-19,21-28,30 and 31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 January 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: Amendment to application

   09/916,787 filed on 1/10/2005.

2. Claims 1-8, 10-13, 15-19, 21-28 and 30-31 are pending in the case. Claims 1, 15,

   and 21 are independent claims. Claims 9,14,20, and 29 have been cancelled.

   Claims 1, 4, 8, 13, 15, 17, 19, 21, 24, and 28 have been amended.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent granted
on an application for patent by another filed in the United States before the invention by the applicant
for patent, except that an international application filed under the treaty defined in section 351(a) shall
have the effects for purposes of this subsection of an application filed in the United States only if the
international application designated the United States and was published under Article 21(2) of such
treaty in the English language.

3. **Claims 1-7, 10, 15-18, 21-27 and 30 remain rejected under 35 U.S.C. 102(e) as**

   being anticipated by Hachamovitch et al. (USPN 6,377,965 B1—filing date

   11/7/1997), hereinafter Hachamovitch.

4. **Regarding independent claim 1,** Hachamovitch discloses a method of provided

   context sensitive code ahead input to a user of a software development application

   running on a computer system (in the Abstract, lines 1-5, the invention is a word

   completion system, it could easily be run in the arbitrary context of a software

   development application), the method comprising: receiving an entry for a

   programming construct in a source code document; (Abstract, lines 5-15, the

   program receives a partial data entry, this would be how it would operate in the

software development scenario) identifying a context in the source code based on a predefined definition of the programming construct contained in the source code (Abstract, lines 15-25, different lists are selected as appropriate to the application; this is a predefined definition of the matching scenario), wherein the predefined definition associates the entry with a code ahead input (Abstract, lines 20-30, the suggestion lists associates the entry with a code ahead input); and displaying, on a display device of the computer system, the code ahead input based upon the identified context (Fig. 4A-4C, the suggestions are displayed).

5. **Regarding dependent claim 2,** the combination of the entry and the code ahead input in Hachamovitch is inherently not a previously entered entry retrieved from memory because the user has a choice of which entry to make.

6. **Regarding dependent claim 3,** in col. 4, lines 35-45, Hachamovitch discloses that identifying the context comprises identifying that the entry has been previously entered and then identifying the code ahead input because on the predefined definition of the entry. (The entries form auto-completion pairs.)

7. **Regarding dependent claim 4,** in col. 4, lines 50-67, Hachamovitch discloses that the word completion is a utility (or a procedure call), and that the particular word is a parameter to the word completion. In the context of a software development application, it would be appropriate to have the code ahead input be a parameter passed to the procedure call defined in the source code.

8. **Regarding dependent claim 5,** in col. 4, lines 35-55, Hachamovitch discloses that the identifying comprises: determining whether a procedure definition exists for the procedure call (this is inherent to calling any procedure in a program); and

identifying a type of the parameter in the procedure definition if the procedure

definition exists for the procedure call, where type of code ahead input provided is

the same as the type of parameter identified (the parameter types are listed in lines

40-45).

9. **Regarding dependent claim 6,** in col. 4, lines 35-40, Hachamovitch discloses

that the context is the initialization of a variable because data situations are

initialized on an ongoing basis.

10. **Regarding dependent claim 7,** in col. 4, lines 45-55, Hachamovitch discloses

that the identifying comprises: determining whether a variable definition exists for

the variable (this is inherent to working with any variable in a program); and

identifying a type of the variable in the variable definition if the variable

definition exists for the variable, where the type of code input provided is the

same as the type of variable identified (however, in Hachamovitch uses a

"wizard" to accomplish this task of typing the completion pairs to contextual

information).

11. **Regarding independent claim 15,** it is an apparatus for performing the method

of claim 1 and is rejected under similar rationale.

12. **Regarding dependent claim 16,** it is an apparatus for performing the method of

claim 2 and is rejected under similar rationale.

13. **Regarding dependent claim 17,** it is an apparatus for performing the method of

claim 4 and is rejected under similar rationale.

14. **Regarding dependent claim 18,** it is an apparatus for performing the method of

claim 6 and is rejected under similar rationale.

15. **Regarding dependent claim 10,** in Fig. 5, Hachamovitch discloses through the structure of the flowchart (which loops back on itself) that the identifying is performed iteratively for each character input at least until the code ahead input.

16. **Regarding independent claim 21,** it is a computer-readable medium with instructions for performing the method of claim 1 and is rejected under similar rationale.

17. **Regarding dependent claim 22,** it is a computer-readable medium with instructions for performing the method of claim 2 and is rejected under similar rationale.

18. **Regarding dependent claim 23,** it is a computer-readable medium with instructions for performing the method of claim 3 and is rejected under similar rationale.

19. **Regarding dependent claim 24,** it is a computer-readable medium with instructions for performing the method of claim 4 and is rejected under similar rationale.

20. **Regarding dependent claim 25,** it is a computer-readable medium with instructions for performing the method of claim 5 and is rejected under similar rationale.

21. **Regarding dependent claim 26,** it is a computer-readable medium with instructions for performing the method of claim 6 and is rejected under similar rationale.

22. **Regarding dependent claim 27,** it is a computer-readable medium with

instructions for performing the method of claim 7 and is rejected under similar

rationale.

23. **Regarding dependent claim 30,** it is a computer-readable medium with

instructions for performing the method of claim 10 and is rejected under similar

rationale.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

24. **Claims 8, 19, and 28 remain rejected under 35 U.S.C. 103(a) as being**

unpatentable over Hachamovitch, further in view of Lin (USPN 6,381,597

B1—filing date 10/7/1999).

25. **Regarding dependent claim 8,** Hachmovitch fails to disclose that the the source

code document comprises source code for a web page, and where the entry is a

partially entered end tag of a hyper text markup language (HTML) text entry and

wherein identifying the context comprises identifying an associated start tag

preceding the text entry, and wherein suggesting a code ahead input comprises

suggesting a completed end tag for the partially entered end tag. However, Lin

discloses associating start and end tags of HTML in col. 7, line 25—col. 8, line 15

in order to successfully process HTM, in the context of a larger web document

comprising source code for a web page. It would have been obvious to one of

ordinary skill in the art at the time of the invention to associate start and end tags

of HTML in the manner of Lin in the context of Hachamovitch in order to

successfully process HTML.

26. **Regarding dependent claim 19,** it is an apparatus for performing the method of

claim 8 and is rejected under similar rationale.

27. **Regarding dependent claim 28,** it is a computer-readable medium with

instructions for performing the method of claim 8 and is rejected under similar

rationale.

28. **Claims 11-13 and 31 remain rejected under 35 U.S.C. 103(a) as being**

unpatentable over Hachamovitch, further in view of Comer et al. (USPN

5,845,300—filing date 6/5/1996), hereinafter Comer.

29. **Regarding dependent claim 11,** Hachamovitch fails to disclose that the provided

code ahead input is in a list of possible inputs based on the identified context.

However, Comer discloses in the Abstract, lines 7-15, that there is a dynamic list

of possible completions. The advantage, also cited in Comer's Abstract, lines 7-

15, is that such listing changes to reflect the status of the current data.

30. **Regarding dependent claim 12,** Hachamovitch fails to disclose providing, if the

received entry is a request for help, a list of relevant terms to the user. However,

Comer, in col. 1, lines 45-60, discloses retrieving help terms in Microsoft Word.

It would have been obvious to one of ordinary skill in the art at the time of the

invention to retrieve help terms as in Comer in the context of Hachmovitch

because this would have provided useful assistance to the user.

31. Regarding dependent claim 13, Hachamovitch fails to disclose that the list of

relevant terms comprises variables and procedures in the source code document.

(where the document as source code is an arbitrary choice However, in col. 4,

lines 55-67, Comer reveals that the completion may be used in conjunction with a

spreadsheet and it was notoriously well known in the art at the time of the

invention that variables and procedures are key elements of a spreadsheet. It

would have been obvious to one of ordinary skill in the art at the time of the

invention to have the terms be variables and procedures because these are

components of a spreadsheet and Comer reveals that spreadsheets can benefit

from completion technology because it can increase the efficiency and reliability

of data entry (see col. 4, lines 63-64).

32. Regarding dependent claim 31, it is a computer-readable medium with

instructions for performing the method of claim 11 and is rejected under similar

rationale.

Response to Arguments

33. Applicant's arguments filed 1/10/2005 have been fully considered but they are not

persuasive.

34. Regarding Applicant's arguments regarding *Hachamovitch* and claims 1, 15, and

21 (as well as the claims dependent therein) the Applicant argues that

Hachamovitch is a word completion system that does not apply to their specific

case of context sensitive code ahead input in software development because it

uses a predefined suggestion list, not definitions. The Examiner's response is that

such a suggestion list constitutes a form of definition, and hence he does not agree

with the traversal.

35. The remainder of the rejections are judged to be insufficient because they are

based on *Hachamovitch*, which is argued to be insufficient. For the reasons stated

above and in the Office Action, the Examiner stands behind rejections employing

Hachamovitch and respectfully disagrees with the traversals.

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

USPN 5,805,911 (filing date 2/1/1995)—Miller

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of

time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than

SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jonathan D. Schlaifer whose telephone number is (571)

272-4129. The examiner can normally be reached on 8:30-5:00, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

JS

STEPHEN HONG
SUPERVISORY PATENT EXAMINER